

Elapsed Time in the Real World

Brief Overview:

This Concept Development Unit will introduce students to the concept of elapsed time using clocks and number lines. Students will explore elapsed time to the hour, half hour, and then minutes. Students will have the opportunity to develop the concept of measuring elapsed time in real world problem solving situations. Students should have a firm knowledge of telling time in order to begin this concept unit involving elapsed time.

NCTM Content Standard/National Science Education Standard:

- **Measurement**
- **Whole Number Computation**
- **Problem Solving**
- **Communication**
- **Reasoning**

Grade/Level:

Grades 3 - 5

Duration/Length:

Three Lessons- 60 minutes per lesson

Student Outcomes:

Students will:

- **Determine start time, elapsed time, and end time to the hour, half hour and nearest minute.**
- **Solve real world problems involving elapsed time.**
- **Use multiple representations to solve problems.**

Materials and Resources:

- Student Resource Pages
- Brads or Brass Tacks
- Scissors (one for each student)
- Crayons
- Hole Punch
- Transparencies: RS 1, TR 2, SR 3, SR 4, SR6, SR7
- *The Long Wait* by Annie Cobb
- Cardstock
- Math Clocks (one for each student)
- Demonstration Clock
- Sentence strips

Development/Procedures:

Lesson 1: Elapsed Time to the Hour and Half Hour Using a Clock

Pre-Assessment - This lesson begins with a review of telling time to the nearest minute. Students will begin by assembling the clock found on Student Resource 1 (Print on cardstock if possible). Have the students use the clock to tell time. Answer key can be found on Teacher Resource 1.

- State a time on the clock and have the students show it on their clock (Examples: 3:12, 1:05, quarter of four)
- Show a time on the clock to the students and have them tell the time. (Examples: 12:55, 4:35, 10:50)

Launch- Begin a discussion by asking students about their favorite television shows.

- Ask students to share start times, end times, or how long the program lasts. Record some of the students' shows on the chalkboard with the start time, end time and how long the show lasts as in the chart below.

TV	Sta	End	How long the show lasts
S	r	t	
h	t	i	
o	t	m	
w	i	e	

	m e		

- Ask students if they know a math word that can be used to describe an amount of time that has passed. Introduce the word, elapsed time. Discuss the definition of elapsed time- the difference between two times.
- Discuss the importance of knowing how to tell time and determining elapsed time.
 - ♦ Why do we need to learn about elapsed time?
 - ♦ How can we use elapsed time in other aspects of our life?
 - ♦ What math tools do we need to determine elapsed time?

Teacher Facilitation - Say: Today we will be working with developing a strategy for determining elapsed time.

- Display Teacher Resource 2 on the overhead projector. Allow the students time to work with a partner to solve the problem. Be sure to supply the students with scrap paper and clocks. You could also reproduce this for pairs of students. Have students share their ideas for solving the problem. Model how to solve for the elapsed time using clocks on the overhead.
 - Set two clocks to 4:00. The first clock will show the start time and the second clock will eventually show the end time.
 - Discuss whether a whole hour has passed. If it has not begin by counting minutes only.
 - Using the second clock, model for the students how to count by fives as you move the minute hand from 4:00 to 4:30. Explain the elapsed time is 30 minutes or a half hour.

- Display a copy of Student Resource 3 on the overhead as well as distributing copies of Student Resource 3 for the students. Discuss how to use the TV Guide. Model the problems for the students as they work along with you. Be sure to ask for student input as you solve each problem. Answer key can be found on Teacher Resource 3.
 - As you model each problem be sure to ask the students if the elapsed time is longer than a whole hour.
 - Model the strategy of counting by fives as your strategy for finding elapsed time as you did above.
 - Model the strategy of counting backwards using the clock when finding the start time. Set both clocks to the end time. Count back by fives with the minute hand using the first clock to find the end time.
 - Model the strategy for finding end time by setting the clocks to start time. Move the hour and minute hands to the end time. Model how to begin at the starting time to count by ones for hours and fives for minutes to arrive at the ending time.

Student Application -

- Distribute Student Resource 3 and allow students time to work with a partner to complete the problems using the clocks. Circulate around the room to answer questions and assist students having difficulties. When students have completed the worksheet, review answers by allowing students to explain how they solved the problems. See Teacher Resource 4 for answers.

Embedded Assessment -

- Distribute Student Resource 4. Allow students time to complete the BCR independently. Have students discuss the answer. Answer found on Teacher Resource 5.

Reteaching/Extension -

- Incorporate real world examples of elapsed time into the students' daily routine throughout the day.
 - How much longer until lunch?
 - How long will science class last today?
- Have students visit <http://nlvm.usu.edu/en/nav/vlibrary.html> to continue practice elapsed time. Click Measurement, scroll to Measurement grades 3-5, click what time will it be?
- Students may create their own TV Guides and develop elapsed to questions to answer.

Lesson 2: Elapsed Time to Five Minutes and Nearest Minute Using Clocks and Number Lines

Pre-Assessment - This lesson begins today with a review of units of time.

- Copy the following table on the chalkboard (Omit answer column when copying to chalkboard.) Allow students time to work with a partner to complete the table. Then discuss answers as a class.

		Answers
A. 1 day	1. The time between 2:45 and 3:00.	1. D
B. 1 hour	2. The time recess starts on Monday to the time recess starts on Tuesday.	2. A
C. 1 minute	3. The time between 7:30 and 8:00.	3. E
D. 1 quarter hour	4. The time at 11:15.	4. F
E. 1 half hour	5. The time it takes for the minute hand to move from the 3 on the clock to the 4.	5. G
F. quarter after 11	6. The time it takes for the second hand to move around the clock once.	6. C
G. 5 minutes	7. The time it takes for the minute hand to move around the clock once.	7. B

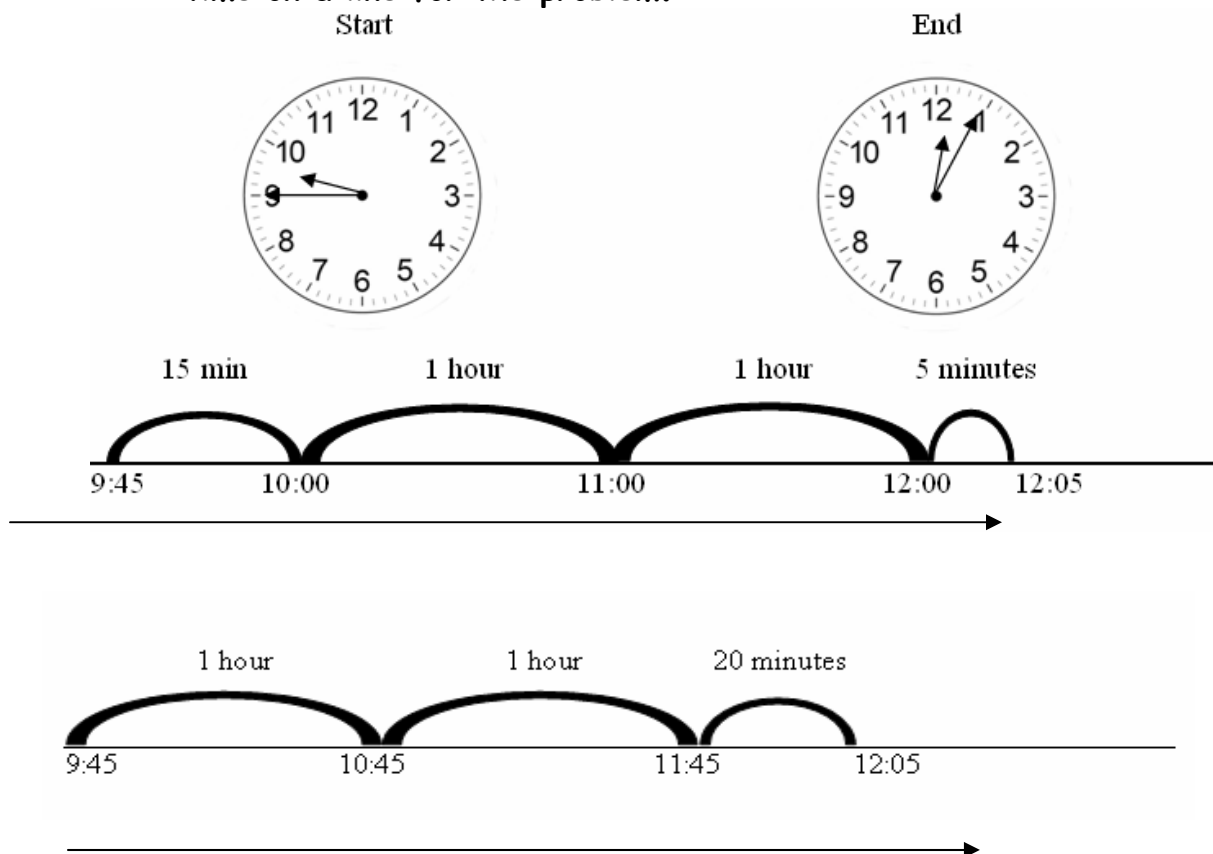
Launch - Begin today's discussion of elapsed time by asking students to share brief personal experiences of waiting in line for rides at an amusement park.

- Read *The Long Wait* by Annie Cobb, about two boys learning about elapsed time while visiting an amusement park.
- Facilitate a discussion about some of the math problems the boys faced and how they used elapsed time during their long wait for the ride.
 - How did elapsed time help the boys as they wait to ride the Cosmic Beetle ride?
 - How did the boys use elapsed time to ride other attractions while still waiting in line for the Cosmic Beetle?
 - What other math skills did Zack and Josh use while at the park?

Teacher Facilitation - Say: Today we will solve problems using elapsed time to the nearest five minutes and nearest minute.

- Distribute Student Resource 5 to the students and place a transparency of this activity on the overhead. Read through the directions and the first problem with the students. Answer key is on Teacher Resource 6.
 - What strategies will we need to use to solve this problem?
 - What are the important pieces of information in the problem?
 - What are we trying to find?
 - What is the difference between elapsed time and end time?
- Allow the students a few minutes to work with a partner to try to solve the problem using what they learned about elapsed time from Lesson 1.
- After a few minutes, have students share their ideas for solving the problem.
- Read the next problem. Model for the students on the clock. The problem may be solved in two ways.

- Begin by making the start time on the clock, 9:45. Demonstrate how to move the minute hand to 10:00 for 15 minutes, then 11:00 for 1 hour, 12:00 for another hour, and 12:05 for 5 more minutes to arrive at 12:05-the end time.
- Or, begin by making 9:45 on the clock. Demonstrate how to move the minute hand to the next hour, 10:45, then another hour, 11:45, then 20 minutes to 12:05-the end time.
- Explain to the students that moving the hands on the clock is a good strategy for working with elapsed time and today they will learn a new strategy to use in addition to organize their thinking.
- Demonstrate on the overhead how to organize the elapsed time on a line for the problem.



- Continue to work through the problems on Student Resource 5 with students. Allow students to share their number line on the chalkboard as other students share how they moved the hands on the clock.

Student Application -

- Distribute Student Resource 6 and allow students time to work with a partner to complete the problems using the clocks and drawing a number line. Circulate around the room to answer questions and assist students having difficulties. When students have completed the worksheet, review answers by allowing students to explain how they solved the problems. Allow students to demonstrate how they moved the hands on the clock or drew their number lines. See Teacher Resource 7 for answers.

Embedded Assessment -

- Distribute Student Resource 7. Allow students time to complete the BCR independently. Have students discuss the answer. Answers can be found on Teacher Resource 8.

Reteaching -

- Have students write down start time and end times throughout the day and calculate elapsed times.
- For students with difficulties, have the students show a time on the clock. Have them count by ones aloud on the clock to an end time in order to find elapsed time. Have students write the start time, end time, and elapsed time in a sentence. (The start time is 8:00. The end time is

10:00. The elapsed time that passed is 2 hours.) Continue to practice with additional examples.

Extension -

- Have early finishers surf <http://teacher.scholastic.com/maven>. Scroll down to Time for a Crime Mystery and click to solve an online math mystery involving elapsed time and reading a train schedule.

Lesson 3: Using Elapsed Time in the Real World

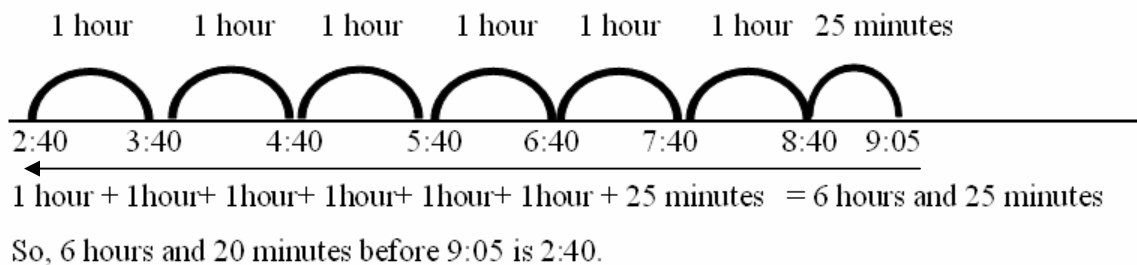
Pre-Assessment /Launch - Begin today's lesson with a tall tale time story. Let the students know they will have an opportunity to write their own tall tale time stories later in the lesson.

- Read to the class: At 12:15 p.m. Johnny started eating hot dogs. He ate them all afternoon. He ate hour after hour, hot dog after hot dog. At 11:50 p.m., Johnny finished his 100,000th hot dog. (Answer: 11 hours 35 minutes)
- Ask the students to work with a partner to see if they can determine how long Johnny spent eating hot dogs. Encourage them to use all the strategies they have learned from previous days.

Teacher Facilitation - Today we will apply our skills to determine elapsed time to solve real world problems.

- Distribute Student Resource 8 to students. As a class, create your actual class schedule including start time, end time and elapsed time. Record information on an overhead copy. Students may work with partners to determine some of the elapsed times.
- Facilitate a discussion about how time is spent throughout the day.
 - How much total time is spent in our classroom?
 - How long is the total school day?
 - How much time elapses from the start of school to lunchtime?

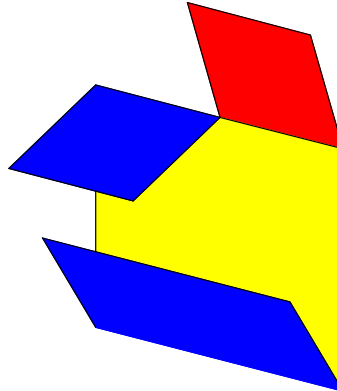
- If school opens 2 hours late, what time will it begin?
- Imagine that you were able to make your own school schedule. What would it look like? Would it be a tall tale story like the one heard at the beginning of the lesson?
- Share the following tall tale story as an example or create your own to share with the students.
 - I arrived at school today in the wee hours of the morning. I graded papers and graded papers for hours and hours. I graded papers for 6 hours and 25 minutes before the school day started. What time did I get here this morning?
- Work through the problem with the students using the clock and number line strategies learned in the previous lessons. Have students share their answers and explanations of how they solved the problem.



Student Application – Students will now have the opportunity to develop and write their own tall tale time stories.

- Explain to the students that they will need to write a tall tale story. (Students may complete this activity in partners or alone based on the needs of the students.)
- Distribute Student Resource 9. Students will also need crayons and scissors.
- Model for the students how to fold the booklet using the instructions on the Student Resource 9. When the booklet is completed, the words start time, end time, and the students' stories should be on the front. When the start flap is lifted, the start time will be written under the flap. When the end time flap is lifted, the end time should be

written under the flap. Under the flap for the story should be the elapsed time. See model below.



- Encourage students to think about and create an interesting story and question to solve. The students need to write the story on the blanks of the booklet. Students need to determine what information will be included on the booklet. The booklet must have a story, start time, end time and elapsed time.

Embedded Assessment -

- Students will exchange foldable booklets with students in the class. The students need to read the story and use scrap paper to solve the problem. Students can check their answers by lifting the flaps of the booklet.
- Exchange books again as time permits.

Reteaching Extension -

- For early finishers, have them visit <http://www.quia.com/mc/66516.html> to play an elapsed time matching game.
- Collect the foldable booklets from students and create a center for students to continue to solve classmate's story problems when they have extra time.

- Have students with difficulties visit <http://nlvm.usu.edu/en/nav/vlibrary.html> to continue practicing elapsed time. Click Measurement, scroll to Measurement grades 3-5, click what time will it be?

Summative Assessment:

To determine student's progress towards understanding elapsed time, have the students complete the assessment which includes 3 selected response questions and a BCR found on Student Resource 10. Answers found on Teacher Resource 9.

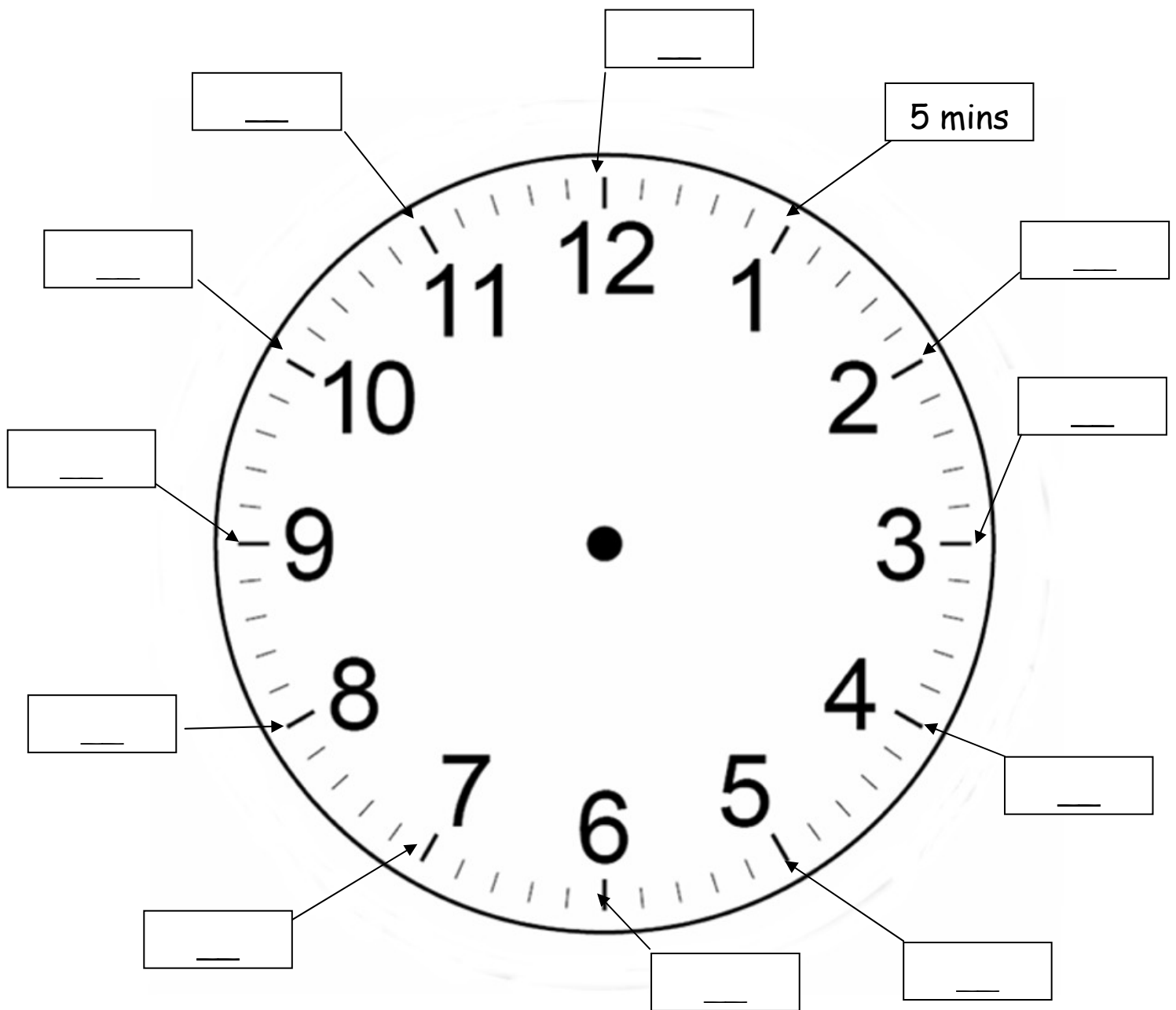
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Name: _____

Student Resource 1



1. Cut out hour hand and minute hand.
2. Punch hole in end of clock hands and center of clock.
3. Assemble using brad.
4. Skip count by 5 to fill in the minute value of each box.

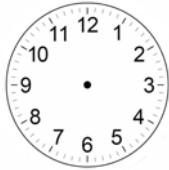
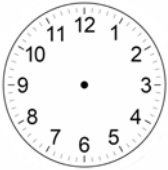
Your favorite show, Drake and Josh, comes on at 4:00 and ends at 4:30. How long does your show last? Work with a partner to explain a strategy to solve this problem.

Name: _____

TV Guide

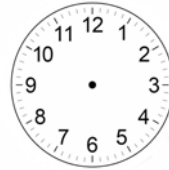
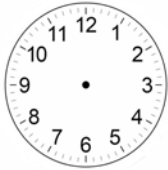
	4:00	4:30	5:00	5:30
Nickelodeon	Drake and Josh	Wayside	Jimmy Neutron	Fairly Odd Parents
Disney	High School Musical		That's So Raven	Hannah Montana
Cartoon Network	Scooby Doo Movie			My Gym Partner is a Monkey

1. Your sister wants to watch High School Musical. It starts at 4:00 and ends at 5:00. How long is she watching TV?



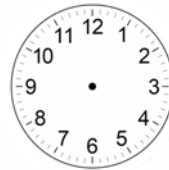
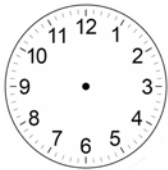
Start Time End Time Elapsed time: _____

2. Fairly Odd Parents ends at 6:00. You watched TV for half an hour. What time did the show start?



Start Time End Time

3. Your brother is going to watch the Scooby Doo movie. It starts at 4:00 and is one hour and thirty minutes long. What time is the movie over?



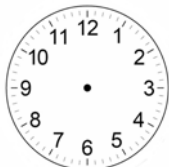
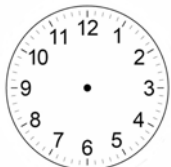
Start Time End Time

Name: _____

Student Resource 3B

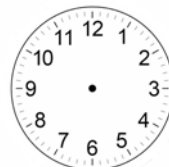
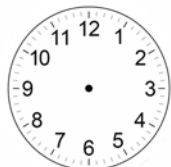
Finding Elapsed Time

4. You stopped watching TV and went outside to play from 5:30 to 8:00. How long did you spend outside?



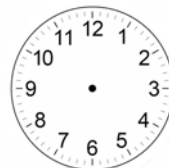
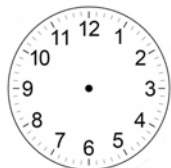
Start Time End Time Elapsed time: _____

5. Your brother went to baseball practice at 4:00. He comes home at 7:30. How long was he at baseball practice?



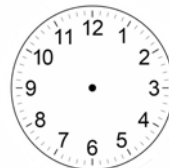
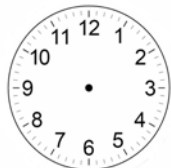
Start Time End Time Elapsed time: _____

6. You ask your mother what time dinner will be ready. It is 6:30 and it takes her 30 minutes to make dinner. What time will you eat?



Start Time End Time Time: _____

7. Your Grandparents are coming to visit. They live 4 hours away and are going to arrive at 7:30. What time did they leave?



Start Time End Time Time: _____

Name: _____

Student Resource 5

Brief Constructed Response

Taylor starts practicing her math facts at 4:30. She is finished practicing at 7:00.



Part A

How long did Taylor practice her math facts?

Part B

Use what you know about elapsed time to explain why your answer is correct. Use number and/or words in your explanation.

Name: _____

Student Resource 5A

At the park!

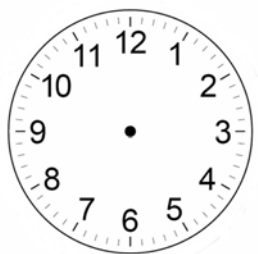
Now it is your turn at the park! You have a full day of rides and fun ahead of you, but you want to make sure that you can have the most fun possible!

You arrive at the park at 9:10, but have to buy tickets and there is already a line! You and your friends have to stand in line for 20 minutes to buy tickets. What time will you get your tickets to get inside the park? Try this with a partner.

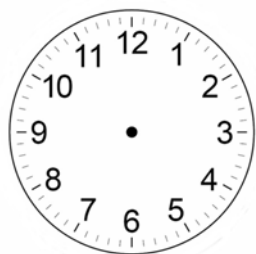
The end time is _____

It is already really hot and you are going to go to the water slide. If you get there at 9:45 and stay there for 2 hours and 20 minutes, what time will it be when you leave the water slide?

Start



End

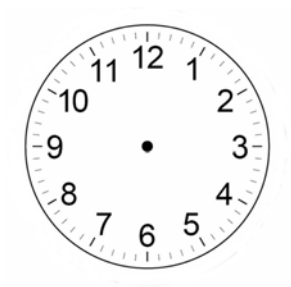


The end time is _____

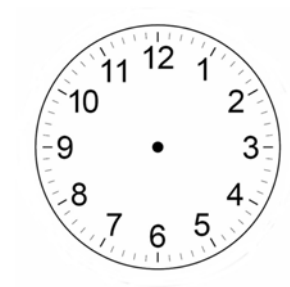
Student Resource 5B

It is now 12:30 and you and your friends are really hungry so you go and eat lunch. You finish eating your delicious bologna sandwich at 1:15. How long did it take you to eat lunch?

Start



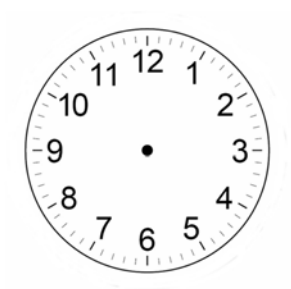
End



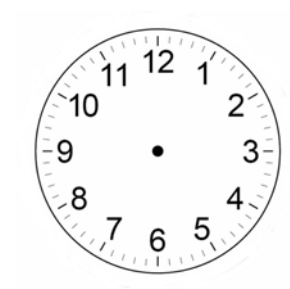
The elapsed time is _____

After lunch you and your friends are standing in line for the bumper cars. Right now it is 2:40. You have been standing in line for an hour and 13 minutes. What time did you start standing in line?

Start



End



The start time is _____

Name: _____

Student Resource 6A

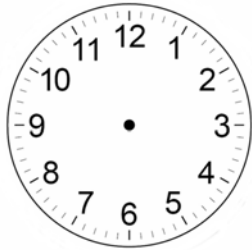
Visiting Baltimore!

Your class is visiting Baltimore on a field trip. During the field trip you are going to visit three different locations. Using the chart below, answer the questions.

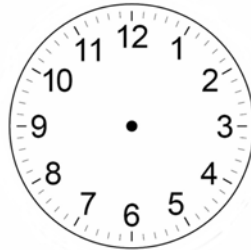
Attraction	Arrive	Leave
Maryland Science Center	8:30 am	10:20 am
National Aquarium	10:30 am	
Museum of Industry		3:00 pm

How long will you be at the Maryland Science Center?

Start



End

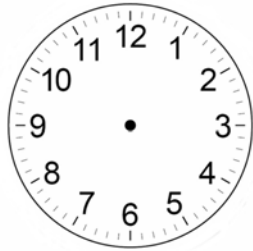


We are going to be at the Maryland Science Center for _____

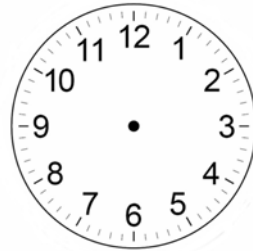
Student Resource 6B

Next, we arrived at the National Aquarium. We stayed at the Aquarium for an hour and 35 minutes. What time did we leave the aquarium?

Start



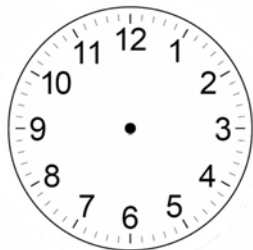
End



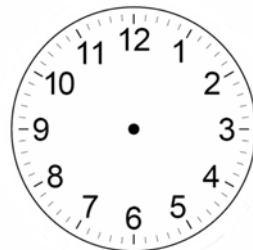
We left the National Aquarium at _____

Finally we come to the Museum of Industry. We have to leave to return to school at 3:00. If we are staying there for 2 hours and 25 minutes, what time did we arrive at the museum?

Start



End



We should arrive at the Museum of Industry at _____

Name:

Student Resource 7

Brief Constructed Response

Maia worked for 6 hours and 20 minutes at the Gap. She started work at 3:35 p.m.

Part A

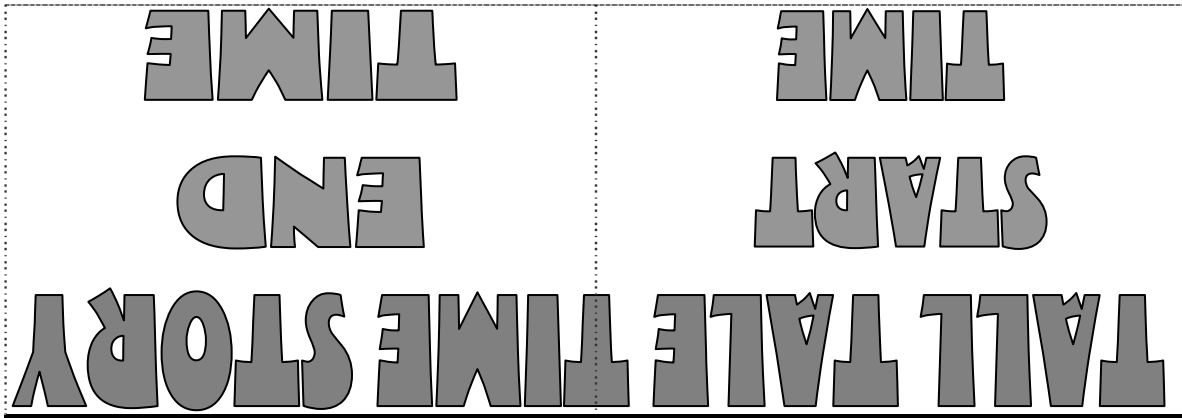
What time did Maia finish work?

Part B

Explain how you determined the time Maia finished work. Use what you know about elapsed time in your explanation. Use words, numbers, and/or symbols in your explanation.

How much time do you spend....?

[illegible]



Name: _____

Date: _____

Directions –

1. **CUT** along the dotted lines **only!**
2. **FOLD** along the thick lines.
3. Lift up the fold with *START TIME* written on it and record the start time of your **TALL TALE TIME STORY**.
4. Lift up the fold with *END TIME* written on it and record the end time of your **TALL TALE TIME STORY**.
5. Record your **TALL TALE TIME STORY** on the lines. Lift up the story and show your work to solve the problem and the *ELAPSED TIME* for your story.
6. Share with a friend!

Name: _____

Student Resource 10A

Elapsed Time Summative Assessment

For these selected response questions, choose the best answer.

1. Ava's party lasted from 1:50 P.M. to 3:40 P.M. How long did the party last?

- Ⓐ 1 hour and 50 minutes
- Ⓑ 2 hours and 50 minutes
- Ⓒ 2 hours and 10 minutes
- Ⓓ 1 hour and 10 minutes

2. Luigi started cooking a pizza at the shown. It needs to cook 2 hours and minutes. At what time will the pizza be ready?



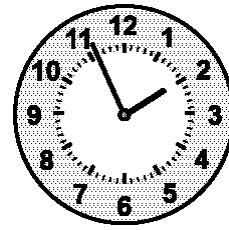
time

40

- Ⓐ 4:45
- Ⓑ 4:50
- Ⓒ 5:10
- Ⓓ 5:30

3. The history class will watch a movie that is 26 minutes long. The clock below shows the starting time. What time will the movie be over?

- Ⓐ 2:22
- Ⓑ 2:26
- Ⓒ 2:34
- Ⓓ 2:38



Brief Constructed Response

Catherine ran in the Boston Marathon and finished in 2 hours and 35 minutes. She crossed the finish line at 1:15.

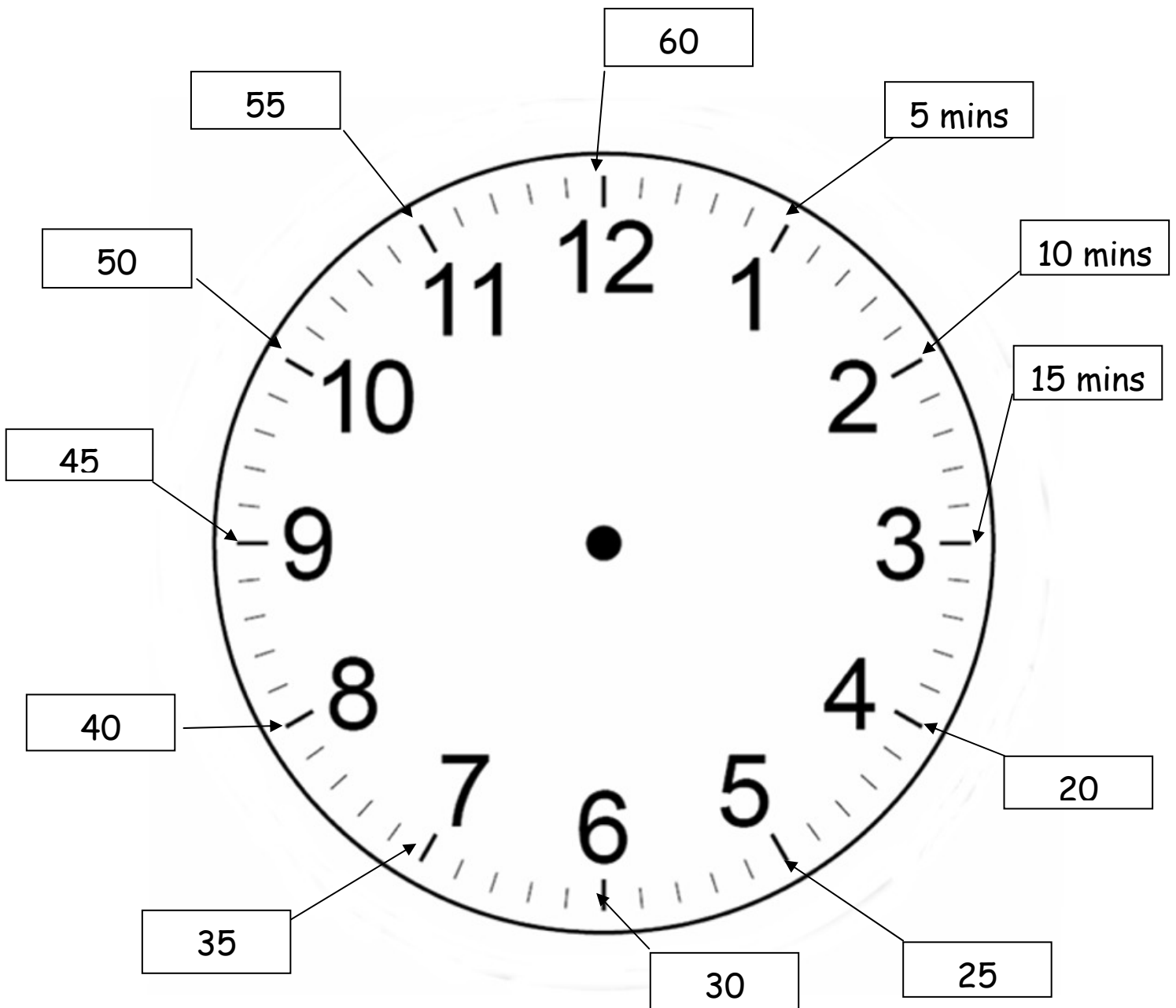
Part A

What time did Catherine begin the race?

Part B

Explain how you determined the time Catherine started the race. Use what you know about elapsed time in your explanation. Use words, numbers, and/or symbols in your explanation.

Teacher Resource 1



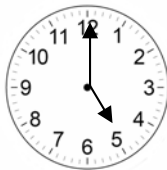
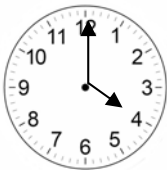
5. Cut out hour hand and minute hand.
6. Punch hole in end of clock hands and center of clock.
7. Assemble using brad.
8. Skip count by 5 to fill in the minute value of each box.

Your favorite show, Drake and Josh, comes on at 4:00 and ends at 4:30. How long does your show last? Work with a partner to explain a strategy to solve this problem.

TV Guide

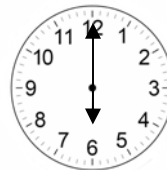
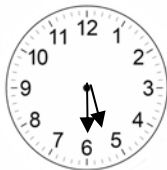
	4:00	4:30	5:00	5:30
Nickelodeon	Drake and Josh	Wayside	Jimmy Neutron	Fairly Odd Parents
Disney	High School Musical		That's So Raven	Hannah Montana
Cartoon Network	Scooby Doo Movie			My Gym Partner is a Monkey

8. Your sister wants to watch High School Musical. It starts at 4:00 and ends at 5:00. How long is she watching TV?



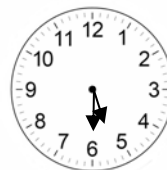
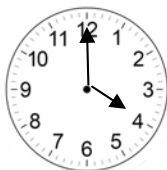
Start Time End Time Elapsed time: 1 hour

9. Fairly Odd Parents ends at 6:00. You watched TV for half an hour. What time did the show start?



Start Time End Time Time: 5:30

10. Your brother is going to watch the Scooby Doo movie. It starts at 4:00 and is one hour and thirty minutes long. What time is the movie over?



Start Time End Time Time: 5:30

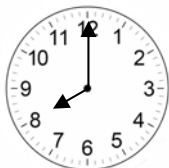
Name: _____

Finding Elapsed Time

11. You stopped watching TV and went outside to play from 5:30 to 8:00. How long did you spend outside?



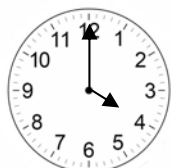
Start Time



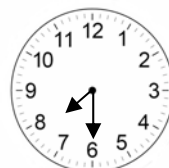
End Time

Elapsed time: 2 hours 30 mins

12. Your brother went to baseball practice at 4:00. He comes home at 7:30. How long was he at baseball practice?



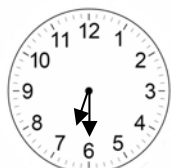
Start Time



End Time

Elapsed time: 3 hours 30 mins

13. You ask your mother what time dinner will be ready. It is 6:30 and it takes her 30 minutes to make dinner. What time will you eat?



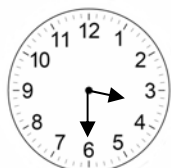
Start Time



End Time

Time: 7:00

14. Your Grandparents are coming to visit. They live 4 hours away and are going to arrive at 7:30. What time did they leave?



Start Time



End Time

Time: 3:30

Brief Constructed Response

Taylor starts practicing her math facts at 4:30. She is finished practicing at 7:00.



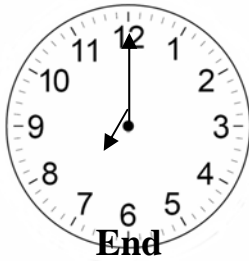
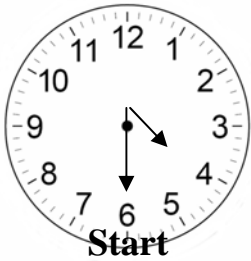
Part A

How long did Taylor practice her math facts?

2 hours 30 minutes

Part B

Use what you know about elapsed time to explain why your answer is correct. Use number and/or words in your explanation.



From 4:30 to 5:00 is 30 minutes

From 5:00 to 7:00 is 2 hours

So, my answer is 2 hours and 30 minutes.

Name: _____

Teacher Resource 6A

At the park!

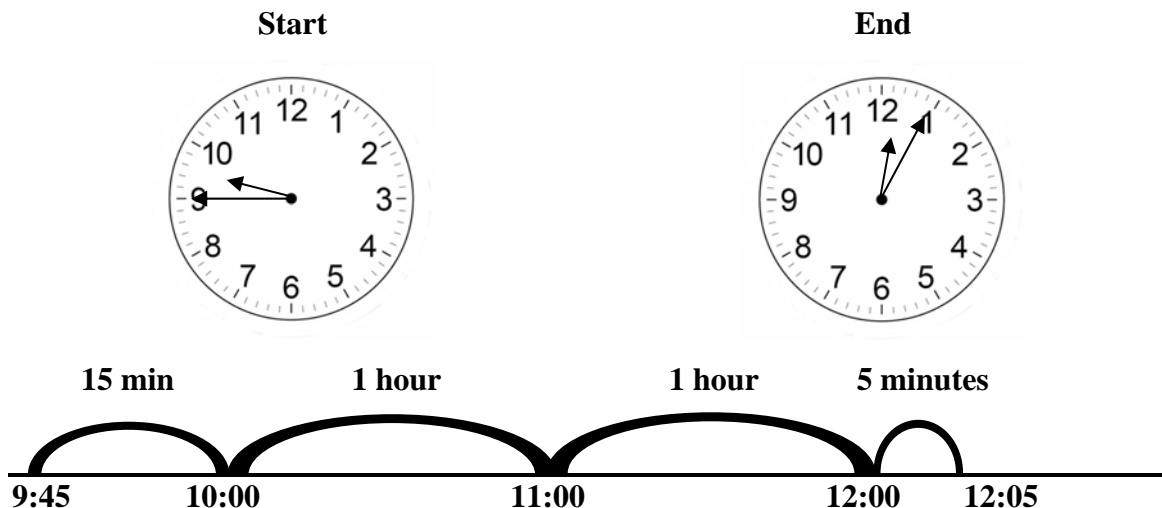
Now it is your turn at the park! You have a full day of rides and fun ahead of you, but you want to make sure that you can have the most fun possible!

You arrive at the park at 9:10, but have to buy tickets and there is already a line! You and your friends have to stand in line for 20 minutes to buy tickets. What time will you get your tickets to get inside the park? Try this with a partner.

	Hours	Minutes	
	9	10	
+		20	
<hr/>			
	9	30	= 9:30

The end time is 9:30

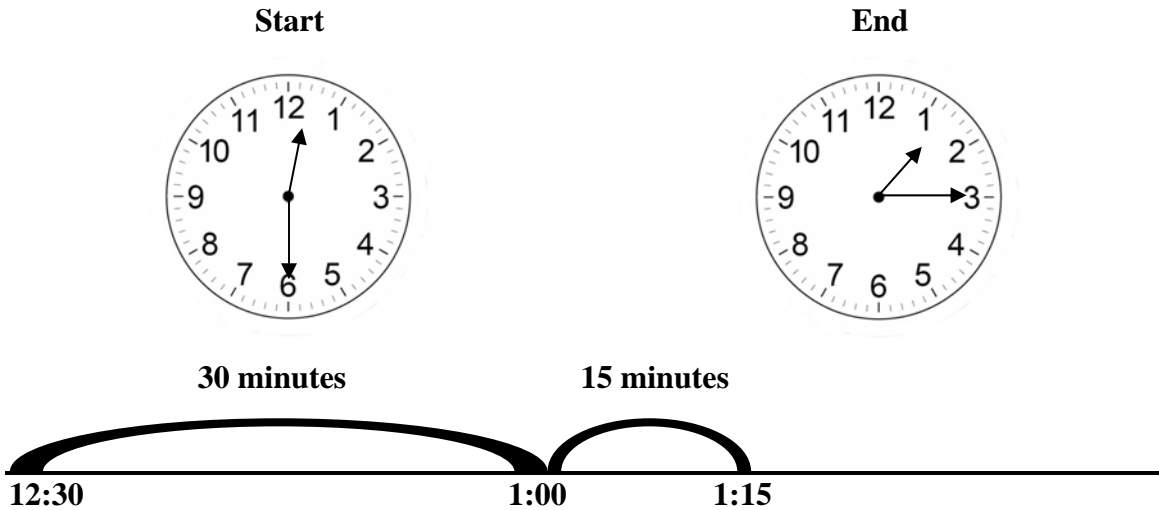
It is already really hot and you are going to go to the water slide. If you get there at 9:45 and stay there for 2 hours and 20 minutes, what time will it be when you leave the water slide?



The end time is 12:05

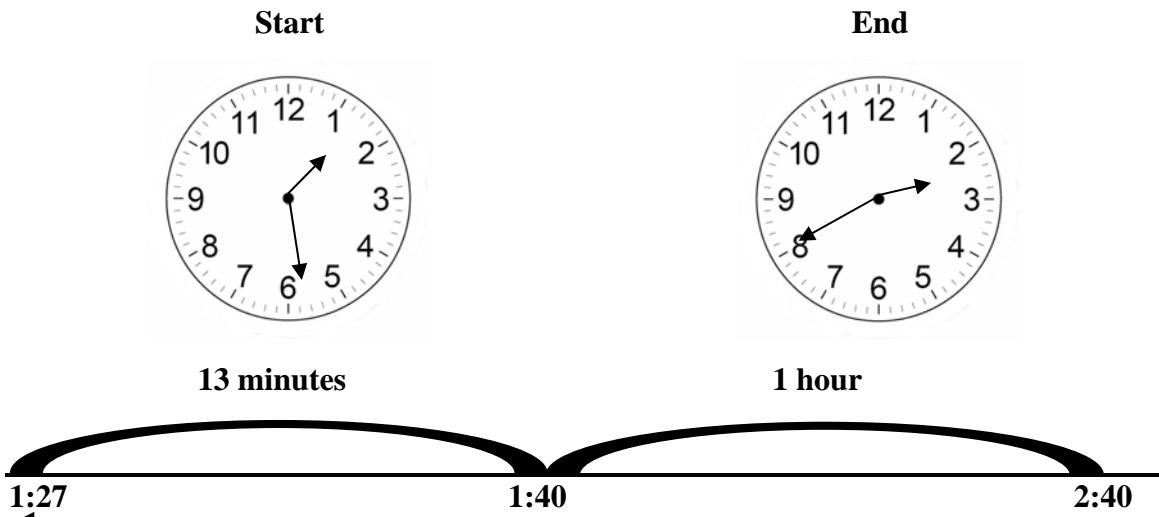
Teacher Resource 6B

It is now 12:30 and you and your friends are really hungry so you go and eat lunch. You finish eating your delicious bologna sandwich at 1:15. How long did it take you to eat lunch?



The elapsed time is 30 minutes + 15 minutes = 45 minutes

After lunch you and your friends are standing in line for the bumper cars. Right now it is 2:40. You have been standing in line for an hour and 13 minutes. What time did you start standing in line?



The start time is 1:27

Name: _____

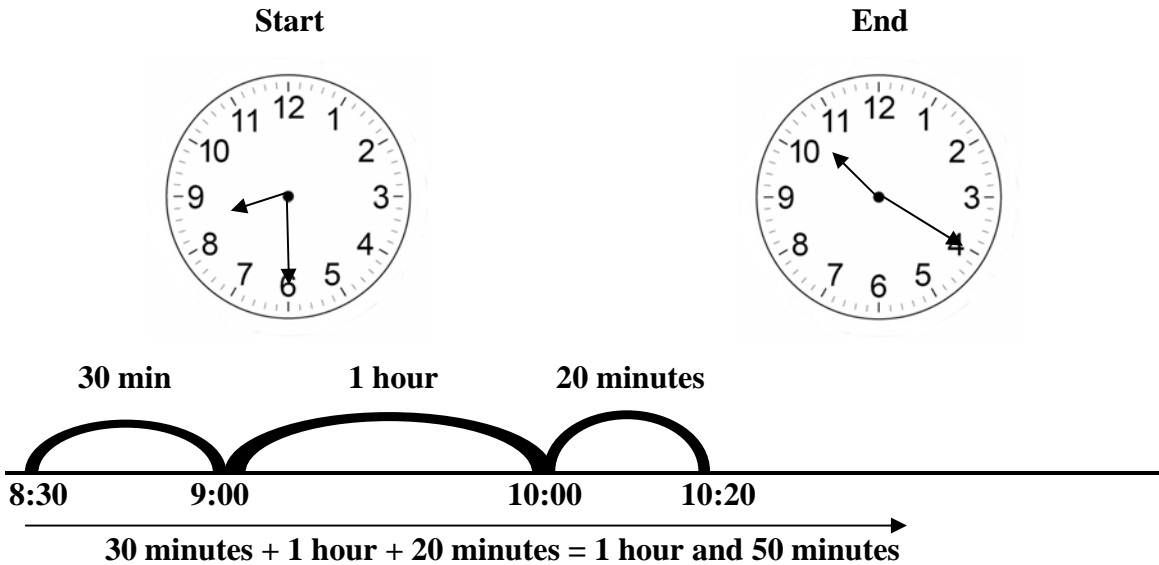
Teacher Resource 7A

Visiting Baltimore!

Your class is visiting Baltimore on a field trip. During the field trip you are going to visit three different locations. Using the chart below, answer the questions.

Attraction	Arrive	Leave
Maryland Science Center	8:30 am	10:20 am
National Aquarium	10:30 am	12:05 pm
Museum of Industry	12:35 pm	3:00 pm

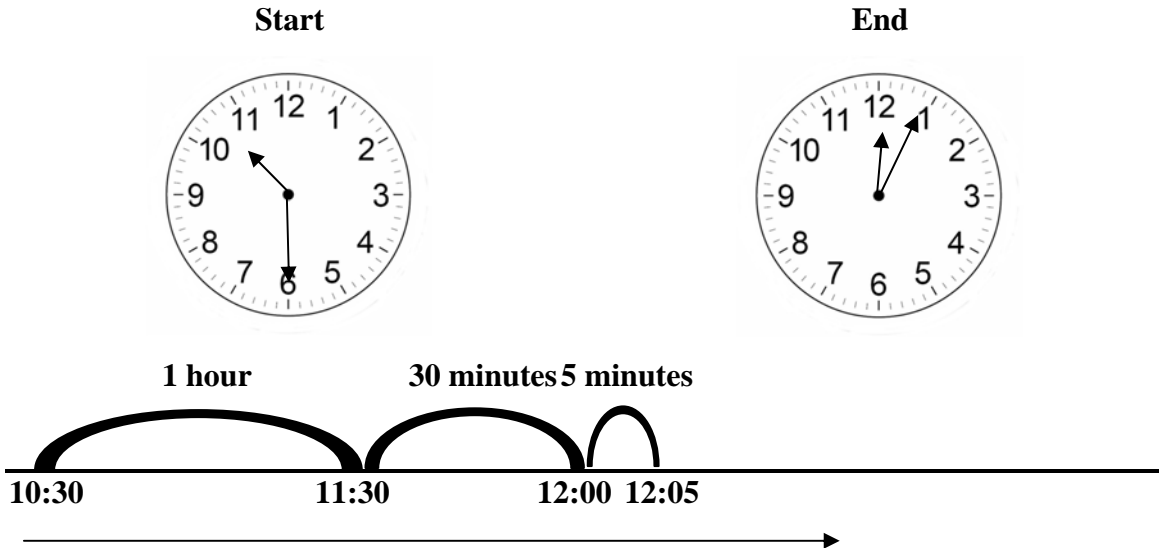
How long will you be at the Maryland Science Center?



We are going to be at the Maryland Science Center for 1 hour and 50 minutes.

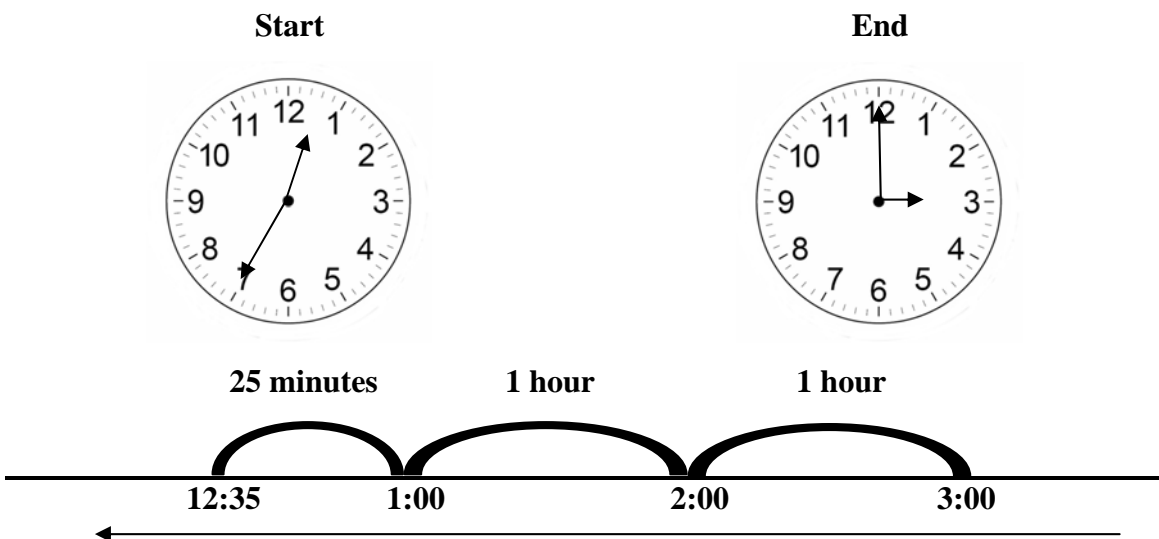
Teacher Resource 7B

Next, we arrived at the National Aquarium. We will stay at the Aquarium for an hour and 35 minutes. What time will we leave the aquarium?



We left the National Aquarium at 12:05

Finally we will go to the Museum of Industry. We will have to leave to return to school at 3:00. If we are staying there for 2 hours and 25 minutes, what time should we arrive at the museum?



We should arrive at the Museum of Industry at 12:35

Name: _____

Teacher Resource 8

Brief Constructed Response

Maia worked for 6 hours and 20 minutes at the Gap. She started work at 3:35 p.m.

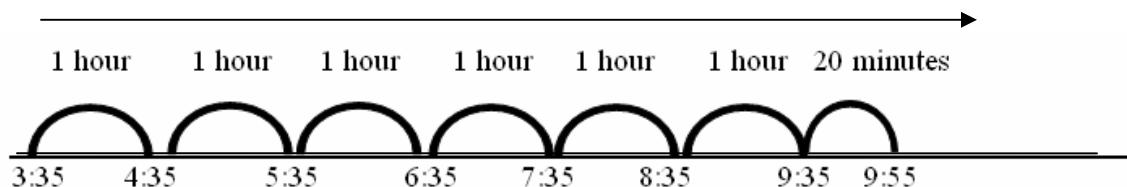
Part A

What time did Maia finish work?

_____ 9:55 _____

Part B

Explain how you determined the time Maia finished work. Use what you know about elapsed time in your explanation. Use words, numbers, and/or symbols in your explanation.



1 hour + 1hour+ 1hour+ 1hour+ 1hour+ 1hour + 20 minutes = 6 hours and 20 minutes

So, 6 hours and 20 minutes after 3:35 is 9:55.

How much time do you spend....? Delete page

[illegible]

Name: _____

Teacher Resource 9A

Elapsed Time Summative Assessment

For these selected response questions, choose the best answer.

4. Ava's party lasted from 1:50 P.M. to 3:40 P.M. How long did the party last?

- ☒ Ⓐ 1 hour and 50 minutes
- ☐ Ⓑ 2 hours and 50 minutes
- ☐ Ⓒ 2 hours and 10 minutes
- ☐ Ⓓ 1 hour and 10 minutes

5. Luigi started cooking a pizza at the shown. It needs to cook 2 hours and minutes. At what time will the pizza be ready?



time
40

- ☐ Ⓐ 4:45
- ☐ Ⓑ 4:50
- ☒ Ⓒ 5:10
- ☐ Ⓓ 5:30

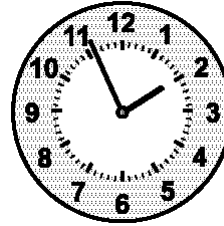
6. The history class will watch a movie that is 26 minutes long. The clock below shows the starting time. What time will the movie be over?

Ⓐ 2:22 Darken this one.

Ⓑ 2:26

Ⓒ 2:34

Ⓓ 2:38



Brief Constructed Response

Catherine ran in the Boston Marathon and finished in 2 hours and 35 minutes. She crossed the finish line at 1:15.

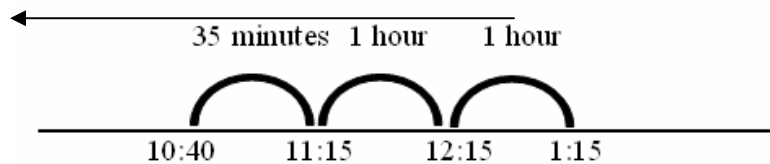
Part A

What time did Catherine begin the race?

10:40

Part B

Explain how you determined the time Catherine started the race. Use what you know about elapsed time in your explanation. Use words, numbers, and/or symbols in your explanation.



$1 \text{ hour} + 1 \text{ hour} + 35 \text{ minutes} = 2 \text{ hours and } 35 \text{ minutes}$

So, 2 hours and 35 minutes before 1:15 is 10:40.
